

**ABSTRACT OF THE DISCLOSURE**

In a method for operating a computed tomography apparatus, having an x-ray source rotatable around a system axis and a radiation detector with a detector-proximate beam-gating diaphragm, and a patient support, a spiral  
5 scan of a patient on the patient support is conducted by rotating the x-ray source around the system axis while moving the subject on the patient support substantially parallel to the system axis. The diaphragm have movable absorber elements that are curved, and are moved independently of each other toward and away from each other in a direction substantially  
10 parallel to they system axis during the spiral scan. The absorber elements are dynamically adjusted in an asymmetrical manner during the spiral scan to reduce overexposure of the examination subject to x-rays.